

Preventative Measures

Tanks installed under Shasta County's current OWTS standards are required to have watertight riser lids that allow easy access and inspection of the septic or pump tank from ground surface.

Precast concrete lids do not provide a watertight seal and should never be used where ground or surface water is anticipated to be higher than the tank lids.

Shasta County Environmental Health Division recommends all tanks, regardless of age, have watertight riser lids installed.



Preventative Measures (cont.)

It is recommended that the tank be pumped and inspected by a licensed septic pumper approximately every eight years for standard septic systems.

Homeowners are advised to request that the pumper:

- Inspect all pipe entries, riser seals, and the tank body/top joint seal to ensure there is no evidence of leaking.
- Remove any roots encountered in the tank(s).
- Seal any holes resulting from root entry.

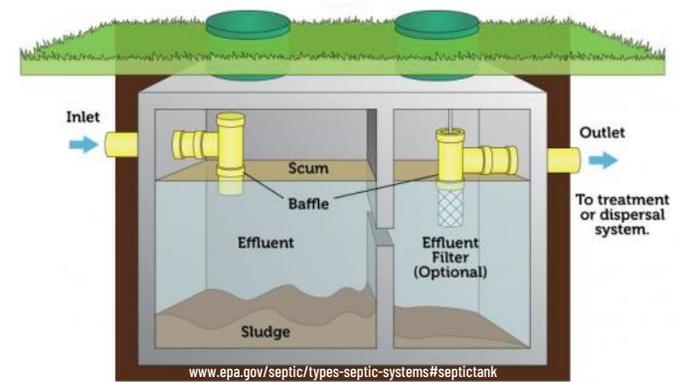
In some cases, root intrusion can lead to tank failure and replacement. Trees that like a lot of water, such as mulberry, poplar, and willows, should not be located within 50 feet of septic or pump tanks.

Shasta County Environmental Health Division

1855 Placer Street Suite 200
Redding, CA 96001

(530) 225-5787

www.co.shasta.ca.us/index/drm/ehd



Preventing Septic Tank Leaks

Onsite Wastewater Treatment Systems (OWTS)

Shasta County Environmental Health Division



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Onsite Wastewater Treatment Systems

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Onsite Wastewater Treatment Systems (OWTS), also known as septic systems, are a requirement for the development of any parcel not served by a sewer system in Shasta County. A properly functioning OWTS is essential to protecting human and environmental health.



OWTSs primarily function to treat and disperse wastewater into the soil. Primary treatment occurs in the septic tank, where suspended solids are separated from liquid waste. The clarified liquid portion passes to the second smaller chamber. From the septic tank, the semi-treated liquid waste, or effluent, passes either directly to the dispersal area or to a pump tank, from where it is pumped to the dispersal area.

The dispersal system functions to remove disease-causing bacteria and nutrients through the combination of biological processes and filtration as wastewater moves through the soil.

While the proper function of all OWTS components is important, the septic tank is especially critical. If its ability to function properly is negatively impacted, this is potentially problematic to the entire system.

Issues That Negatively Impact Septic Tank Function

Although septic and pump tanks are made from durable materials, like concrete, they are still susceptible to damage from heavy machinery/vehicle traffic and root intrusion. Pipe connection points at the inlet and outlet of the septic tank are susceptible to these issues as well.



Septic tank lid seals can also become a point of water leakage. If the water tightness of the seals becomes compromised due to improper installation or weathering, leaks can occur. Concrete tanks are made from two or more pieces of precast concrete and commonly leak from the joints where the pieces meet.



Issues Related to Septic and Pump Tank Leakage

OWTSs are carefully sized using soil testing and flow rates, dependent on the size of the residence, and to ensure the system is not too big or small to adequately treat and disperse wastewater.

Leaking septic and pump tanks unnecessarily add water to the system. Depending on the severity of the leak, a leaking tank could add hundreds of additional gallons of water to an OWTS per day. The additional water can overwhelm an OWTS, causing its premature failure. Excessive water intrusion can also prevent adequate treatment of wastewater, which may lead to bacteria and chemical impacts of ground and surface waters in the area.

Leaking pump tanks will cause pumps to run more frequently, even constantly, which may lead to premature pump failure and excessive utility bill fees.

